



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,378	07/17/2003	Michael David Schmitz	06975-383001	9706
26171	7590	12/28/2004	EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			TRAN, DALENA	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/620,378	SCHMITZ, MICHAEL DAVID	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dalena Tran	3661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 17 July 2003.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-47 is/are pending in the application.

    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1,6-23,26,28,31-36,38 and 41-46 is/are rejected.

7) ☒ Claim(s) 2-5,24,25,27,29,30,37,39,40 and 47 is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### Notice to Applicant(s)

1. This application has been examined. Claims 1-47 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,6-23,26,28,31-36,38, and 41-46, are rejected under 35 U.S.C. 103(a) as being unpatentable over Behr et al. (US 2003/0156049 A1) in view of Kamei et al. (6,826,471).

As per claims 1 and 18, Behr et al. disclose a method for displaying driving directions having multiple maneuvers, method comprising: accessing maneuver information for a route from an origin to a destination (see at least [0016] through [0019]; [0032] through [0033]; [0037] through [0039]; [0087] through [0088]; and [0099]). Behr et al. do not explicitly disclose interstate shield route symbol. However, Behr et al. disclose display travel directions along with a display of highway signs and other informations (see at least [0039]). To combine with Behr et al. reference, Kamei et al. also display a highway shield route symbol that has substantially the same appearance as highway road sign and includes a road number (figure 11), with a maneuver of the driving directions that represents a first occurrence of a particular interstate having the road number in a list of maneuvers for the route (see at least columns 15-16, lines 1-51). Also, in figure 14A, Kamei et al. disclose associated information of interstate 10. Therefore, it is obvious that an interstate shield route symbol can also be displayed along with travel direction.

Also, it is well known that the use of picture, symbols, words, or phrases, etc. can be stored in a database, and scripts or programs display database contents based on user input. Anytime, when a user connect to Internet to request for a driving direction, the web server will connect to a database that stored picture, symbols, words, or phrases, then will output a driving direction associated with each symbol. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the functions discloses by Behr et al., and Kamei et al. to associate an interstate shield route symbol in a list of maneuvers for the route to help the driver quickly recognize the turn or exit on the route in the driving direction.

As per claims 6-8, Kamei et al. disclose a highway shield route symbol that has substantially the same appearance, shape, and color as highway road sign and includes a road number, with a maneuver of the driving directions that represents a first occurrence of a particular interstate having the road number in a list of maneuvers for the route (see at least columns 13-14, lines 62-39; and columns 15-16, lines 1-51).

As per claims 9-13, and 16, Behr et al. disclose associating a turn route symbol with a maneuver based on a turn angle of the maneuver when the maneuver does not represent a first occurrence of a particular interstate having a particular road number in the list of maneuvers for the route and the maneuver does not represent a first occurrence of a particular highway having a particular road number in the list of maneuvers, the turn route symbol comprises a slight left turn, slight right turn, a sharp left turn a sharp right turn, wherein at most one route symbol is associated with a particular maneuver (see at least [0108], and figure 6-10).

As per claims 14-15, Behr et al. do not disclose merge route symbol and exit route symbol. However, Kamei et al. disclose merge route symbol and exit route symbol with a

maneuver of an exit from highway or an interstate (see at least column 12, lines 19-43). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the functions disclosed by Behr et al. by combining merge route symbol and exit route symbol with a maneuver of an exit from highway or an interstate for providing detail driving instruction to a driver to avoid confusion in highway or interstate which can cause danger while driving.

As per claim 17, Behr et al. disclose applying priority information to determine a route symbol type of several route symbol types to be associated with a maneuver of the driving directions that does not represent a first occurrence of a particular interstate (see at least [0100] through [0107]), and associating the route symbol type with the maneuver (see at least [0039]).

As per claim 19, Behr et al. disclose the driving directions are displayed by a system provided through an Internet service provider (see at least [0057]).

As per claims 20-21, Behr et al. disclose the driving directions are displayed by a printer and a display device associated with a client system (see at least [0055] through [0056]).

As per claim 22, Behr et al. disclose the driving directions are displayed by a display device associated with a vehicle on-board navigation system (see at least [0143] through [0146]).

As per claim 23, Behr et al. disclose a method for displaying driving directions having multiple maneuvers, method comprising: accessing maneuver information for a route from an origin to a destination (see at least [0016] through [0019]; [0032] through [0033]; [0037] through [0039]; [0087] through [0088]; and [0099]), applying priority information to determine a route symbol of several route symbol types to be associated with a maneuver of the driving directions (see at least [0100] through [0107]), associating the route symbol with the maneuver, and each

maneuver in the list of maneuvers for the route is associated with at most one route symbol (see at least [0039]). Behr et al. do not explicitly disclose interstate shield route symbol. However, Behr et al. disclose display travel directions along with a display of highway signs and other informations (see at least [0039]). To combine with Behr et al. reference, Kamei et al. also display a highway shield route symbol that has substantially the same appearance as highway road sign and includes a road number (figure 11), with a maneuver of the driving directions that represents a first occurrence of a particular interstate having the road number in a list of maneuvers for the route (see at least columns 15-16, lines 1-51). Also, in figure 14A, Kamei et al. disclose associated information of interstate 10. Therefore, it is obvious that an interstate shield route symbol can also be displayed along with travel direction.

Also, it is well known that the use of picture, symbols, words, or phrases, etc. can be stored in a database, and scripts or programs display database contents based on user input. Anytime, when a user connect to Internet to request for a driving direction, the web server will connect to a database that stored picture, symbols, words, or phrases, then will output a driving direction associated with each symbol. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the functions disclosed by Behr et al., and Kamei et al. to associate an interstate shield route symbol in a list of maneuvers for the route to help the driver quickly recognize the turn or exit on the route in the driving direction.

As per claim 26, Behr et al. disclose highway shield route symbol that has substantially the same appearance as a highway road sign and includes a road number is associated with a second maneuver of driving directions that represents an occurrence of a particular highway having the road number in the list of maneuvers for the route (see at least [0108]).

Claims 28, and 38, are computer readable medium and system claims corresponding to method claim 1 above. Therefore, they are rejected for the same rationales set forth as above.

Claims 31-32, 33-34, are computer readable medium claims corresponding to method claims 6-7, 17-18 above. Therefore, they are rejected for the same rationales set forth as above.

Claims 35, and 36, are computer readable medium claims corresponding to method claims 23, and 26 above. Therefore, they are rejected for the same rationales set forth as above.

Claims 41, and 42, are system claims corresponding to method claims 6, and 9 above. Therefore, they are rejected for the same rationales set forth as above.

Claims 43-44, are system claims corresponding to method claims 17-18 above. Therefore, they are rejected for the same rationales set forth as above.

Claims 45, and 46, are system claims corresponding to method claims 23, and 26 above. Therefore, they are rejected for the same rationales set forth as above.

4. Claims 2-5, 24-25, 27, 29-30, 37, 39-40, and 47, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Loughmiller, Jr. et al. (4,914,605)

. Nakatani et al. (5,465,089)

. Kepler (6,477,460)

Art Unit: 3661

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner  
Dalena Tran



December 17, 2004